

## Are Doctors Exposed to Radiation Even When Wearing Protectors during Fluoroscopic Procedures?

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### LETTER TO EDITORS

I enjoyed the article titled “Radiation Exposure of the Hand and Chest during C-arm Fluoroscopy-Guided Procedures” [1]. It is generally agreed that the hazards of radiation during fluoroscopic procedures can affect doctors as well as patients [2–4]. Instead of increasing the use of fluoroscopy in pain medicine, most physicians are not aware of the risks of radiation [5].

Your study was very informative for doctors who perform fluoroscopic procedures. I am curious, however, about the amount of radiation that affects doctors who wear protectors during such procedures. Most doctors, even those not receiving education on radiation hazards, habitually wear a lead apron, lead glasses and lead gloves. There are many kinds of protectors, such as one-piece and two-piece lead aprons, gloves, and glasses. When wearing these protectors during fluoroscopic procedures, doctors think they are shielded from radiation. As you know, radiation can cause much harm despite the use of protectors in these situations. I am very curious about the radiation hazards for operators who wear these protectors; it would have been useful to check radiation doses with

protectors.

I would appreciate clarification on one more issue. You describe the distance from the center of the X-ray field to the physician. Does that mean the distance from the axis between the tube and intensifier, or does it mean the distance from just the tube of the fluoroscope?

### REFERENCES

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